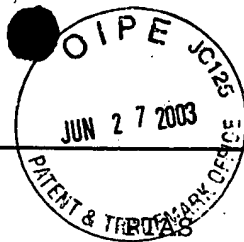




UNITED STATES
PATENT AND
TRADEMARK OFFICE



LSB

10275-137001

JANUARY 31, 2002

FISH & RICHARDSON P.C.
LOUIS MYERS
225 FRANKLIN STREET
BOSTON, MASSACHUSETTS 02110-2804

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov



101952985A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/17/2002

REEL/FRAME: 012349/0127
NUMBER OF PAGES: 5

BRIEF: DOCUMENT RE-RECORDED TO CORRECT ERRORS CONTAINED IN PROPERTY NUMBER 09398620 DOCUMENT PREVIOUSLY RECORDED ON REEL 010847 FRAME 0196.

ASSIGNOR:
POLLOCK, DAN

DOC DATE: 04/11/2001

ASSIGNOR:
ECHELAND, YANN

DOC DATE: 04/06/2001

ASSIGNOR:
MEADE, HARRY M.

DOC DATE:

RECEIVED

ASSIGNEE:
GENZYME TRANSGENICS CORPORATION
175 CROSSING BOULEVARD
POST OFFICE BOX 9322
FRAMINGHAM, MASSACHUSETTS
01701-
9322

FEB 07 2002

**FISH & RICHARDSON, PC.
BOSTON OFFICE**

SERIAL NUMBER: 09398610
PATENT NUMBER:

FILING DATE: 09/17/1999
ISSUE DATE:

NO DOCKETING REQUIRED

Reviewed By Practice Systems

Initials PEC On ph

SHARON LATIMER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

01-30-2002

REC



ET

101952985

Commissioner for Patents: Please record the attached original document(s) or copy(ies).

1. Name of conveying party(ies):

Dan Pollock, Yann Echelard and Harry M. Meade

Additional name(s) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☐ Assignment
☐ Merger
☐ Security Agreement
☐ Change of Name
☒ Other: Corrective of 010847/0196, Serial 09/398,620

Execution Date: 04/06/00; 04/11/00

2. Name and address of receiving party(ies):

Genzyme Transgenics Corporation
175 Crossing Boulevard
Post Office Box 9322
Framingham, MA 01701-9322

Additional names/addresses attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed with a new application, the execution date of the application is:

A. Patent Application No(s):

09/398,610

B. Patent No(s):

Additional numbers attached? ☐ Yes ☒ No

5. Name/address of party to whom correspondence concerning document should be mailed:

LOUIS MYERS
Fish & Richardson P.C.
225 Franklin Street
Boston, Massachusetts 02110-2804

6. Total number of applications/patents involved: 1

7. Total fee (37 CFR §3.41): \$40

- ☐ Enclosed
☐ Authorized to charge Deposit Account.

8. Deposit Account No.: 06-1050

Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.

DO NOT USE THIS SPACE

Fee OK

9. Statement and Signature: *To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Laurie Butler Lawrence

Reg. No. 46,593

Name of Person Signing

Laurie Lawrence
Signature

Date

1/17/02

Total number of pages including coversheet, attachments and document:

20371320.doc

CERTIFICATE OF TRANSMISSION BY FACSIMILE

I hereby certify that this correspondence is being transmitted by facsimile to the Patent and Trademark Office on the date indicated below.

1/17/02
Date of Transmission

Terril L. Knox
Signature

Terril L. Knox
Typed Name of Person Signing Certificate



06-16-2000



101382243

2 SHEET

Substitute Form PTO-1595
Attorney Docket No.: 10275-137001

S-31-00

Assistant Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Dan Pollock, Yann Echelard and Harry M. Meade Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): Genzyme Transgenics, Inc. Five Mountain Road Framingham, MA 01701-9322 Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 04/08/00 and 04/11/00	
4. Application number(s) or patent number(s): 09/398,620 If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): B. Patent No(s): Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name/address of party to whom correspondence concerning document should be mailed: P. LOUIS MYERS Fish & Richardson P.C. 225 Franklin Street Boston, MA 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additionally charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i>	
Lauranne Butler Reg. No. P46,593 Name of Person Signing	<i>Lauranne Butler</i> Signature 5/26/00 Date
Total number of pages including coversheet, attachments and document: 4	

20087256.doc

06/15/2000 ASCOTT 00000140 09398620

01 FC:561

40.00 GP

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

May 26, 2000 *Laura Labrie* *Laura Labrie*
Date of Deposit Signature Typed Name of Person Signing Certificate

ASSIGNMENT

For valuable consideration, we, Dan Pollock of Medway, MA; Yann Echelard of Jamaica Plain, MA; and Harry M. Meade of Newton, MA, hereby assign to Genzyme Transgenics, Inc., a Massachusetts corporation having a place of business at: Five Mountain Road, Framingham, MA 01701-9322, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us this day, entitled TRANSGENICALLY PRODUCED FUSION PROTEINS, filed September 17, 1999, and assigned U.S. Serial Number 09/398,610, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at One Mountain Road Framingham
this 11 day of April, 2000
Dan Pollock L.S.
Dan Pollock

State of Massachusetts:
: ss.

County of Middlesex :

Before me this 11 day of April, 2000, personally appeared
Dan Pollock, known to me to be the person whose name is subscribed to the foregoing
Assignment and acknowledged that he executed the same as his free act and deed for the
purposes therein contained.

Marie Seavey
Notary Public

My Commission Expires:

USA MARIE SEAVEY
Notary Public

My Comm. Expires Dec. 13, 2002

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at 175 Crowsing Blvd, Framingham Ma
this 4 day of April, 2000
Yann Echelard L.S.
Yann Echelard

State of Massachusetts:
: ss.

County of Middlesex :

Before me this 6 day of April, 2000, personally appeared Yann Echelard, known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

USA Marie Seavely
Notary Public

My Commission Expires:

USA MARIE SEAVELY
Notary Public

My Comm. Expires Dec. 13, 2002

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at One Mountain Road Framingham
this 11 day of April, 2000
Harry M. Meade L.S.
Harry M. Meade.

State of Massachusetts :

: ss.

County of Dorchester :

Before me this 11 day of April, 2000, personally appeared Harry M. Meade, known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

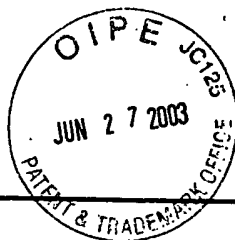
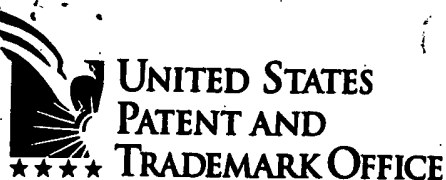
USA Marie Seavely
Notary Public

My Commission Expires:

USA MARIE SEAVELY
Notary Public

My Comm. Expires Dec. 13, 2002

[Notary's Seal Here] +



PLM
GLF

APRIL 25, 2002

PTAS

10275-137001
Commissioner for Trademarks
Arlington, VA 22202-3513
www.uspto.gov

FISH & RICHARDSON P.C.
~~LOUIS MYERS~~
225 FRANKLIN STREET
BOSTON, MA 02110-2804



102003322A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/12/2002

REEL/FRAME: 012624/0047
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

RYBAK, SUSANNA M.

DOC DATE: 04/06/2000

ASSIGNEE:

UNITED STATES OF AMERICA, AS
REPRESENTED BY THE SECRETARY OF
HEALTH AND HUMAN SERVICES
OFFICE OF TECHNOLOGY TRANSFER
6011 EXECUTIVE BLVD., SUITE 325
ROCKVILLE, MARYLAND 20852-3804

SERIAL NUMBER: 09398610
PATENT NUMBER:

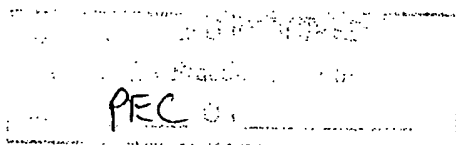
FILING DATE: 09/17/1999
ISSUE DATE:

RECEIVED

SAUNDRA BALLENGER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

APR 29 2002

FISH & RICHARDSON, P.C.
BOSTON OFFICE



03-06-2002

Substitut Form PTO-1595
Attorney Docket No.: 10275-137001

RECOI



102003322

Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Dr. Susanna M. Rybak Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): United States of America, as represented by The Secretary of Health and Human Services Office of Technology Transfer Suite 325 6011 Executive Blvd. Rockville, MD 20852-3804 Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 04/06/2000	4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 09/398,610 B. Patent No(s): Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Name/address of party to whom correspondence concerning document should be mailed: LOUIS MYERS Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i>	
Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing	<i>Laurie Butler Lawrence</i> Signature 1/17/02 Date
Total number of pages including coversheet, attachments and document: 3	

20371937.doc

03/05/2002 6TON11 00000211 09398610

01 FC:581

40.00 OP

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

1/17/02 *Terril L. Knox* Terril L. Knox
Date of Deposit Signature Typed Name of Person Signing Certificate

ASSIGNMENT

For valuable consideration, I, Susanna M. Rybak, of, Frederick, MD, hereby assign to the government of the United States of America as represented by the Secretary of the Department of Health and Human Services, (hereinafter, THE GOVERNMENT) and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by me this day, entitled TRANSGENICALLY PRODUCED FUSION PROTEINS filed September 17, 1999, and assigned U.S. Serial Number 09/398,610, and I authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and I agree for me and my respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at NCI/FCRDC
this 6 day of April, 2000
Susanna M. Rybak L.S.

State of Maryland :
: ss.
County of Frederick :

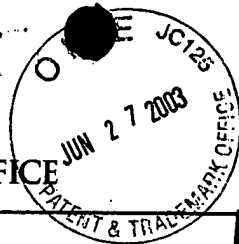
Before me this 6 day of April, 2000, personally appeared
Susanna M. Rybak, known to me to be the person whose name is subscribed to the foregoing
Assignment and acknowledged that she executed the same as her free act and deed for the
purposes therein contained.

Anna E. Rogers
Notary Public
My Commission Expires: 04/01/01

[Notary's Seal Here]

20015173.doc

 UNITED STATES
PATENT AND
TRADEMARK OFFICE



10275/137001
PLM
CMY

APRIL 17, 2003

FISH & RICHARDSON P.C.
LOUIS MYERS
2255 FRANKLIN STREET
BOSTON, MA 02110-2804

RECEIVED

PTAS

APR 22 2003

FISH & RICHARDSON, P.C.
BOSTON OFFICE

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov



102314488A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/11/2002

REEL/FRAME: 013575/0931
NUMBER OF PAGES: 4

BRIEF: CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF THE ASSIGNEE FILED ON 02/12/02. RECORDED ON REEL 012624 FRAME 0041. ASSIGNOR HEREBY CONFIRMS THE ENTIRE INTEREST.

ASSIGNOR:

EDGE, MICHAEL D.

DOC DATE: 07/24/2002

ASSIGNEE:

ASTRAZENECA UK LIMITED
15 STANHOPE GATE
LONDON W1Y 6LN, UNITED KINGDOM

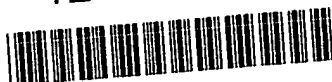
SERIAL NUMBER: 09396610
PATENT NUMBER:

FILING DATE: 09/15/1999
ISSUE DATE:

DOROTHY RILEY, PARALEGAL
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



12-18-2002



102314488

SHEET

Substitute Form PTO-1595
Attorney Docket No.: 10275-137001
Client's Ref. No.: GTC-42

C

Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Michael D. Edge Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): AstraZeneca UK Limited 15 Stanhope Gate London W1Y 6LN United Kingdom Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input checked="" type="checkbox"/> Other: Request to Correct Notice of Recordation of Assignment Document Execution Date: 7/24/02	
4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 09/398,610 B. Patent No(s): Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name/address of party to whom correspondence concerning document should be mailed: LOUIS MYERS Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing Signature: <i>Laurie Lawrence</i> Date: <i>12/10/02</i>	
Total number of pages including coversheet, attachments and document: 3	

20551404.doc

12/17/2002 DBYRME 00000208 09398610

01 FC:8021

40.00/00

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

12/6/02
Date of Deposit

Cassandra Beepot
Signature

Cassandra Beepot
Typed Name of Person Signing Certificate

03-06-2002

Substitute Form PTO-1595
Attorney Docket No.: 10275-137001

102003323

RECC

T

Commissioner for Patents: Please record the attached original document(s) or copy(ies).

1. Name of conveying party(ies): Michael D. Edge Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): AstraZeneca Limited 15 Stanhope Gate London W1Y 6LN United Kingdom Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 03/16/2000	4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 09/398,610 Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No B. Patent No(s): 09/398,610
5. Name/address of party to whom correspondence concerning document should be mailed: LOUIS MYERS Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> <div style="display: flex; justify-content: space-between;"> <div> Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing </div> <div> Signature </div> <div> 1/17/02 Date </div> </div>	
Total number of pages including coversheet, attachments and document: 3	

20371945.doc

03/05/2002 6TOM11 00000210 09398610

01 FC:581

40.00 OP

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

1/17/02 **Terri L. Knox**
Date of Deposit Signature Typed Name of Person Signing Certificate

ASSIGNMENT

For valuable consideration, I, Michael D. Edge, of Macclesfield, Cheshire, United Kingdom, hereby assign to AstraZeneca UK Limited, a Great Britain corporation having a place of business at 15 Stanhope Gate, London W1Y 6LN, United Kingdom, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by me this day, entitled TRANSGENICALLY PRODUCED FUSION PROTEINS, filed September 17, 1999, and assigned U.S. Serial Number 09/398,610, and I authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and I agree for me and my respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at CHESTER, U.K.,
this 24th day of JULY, 2002
Michael D. Edge L.S.
Michael D. Edge

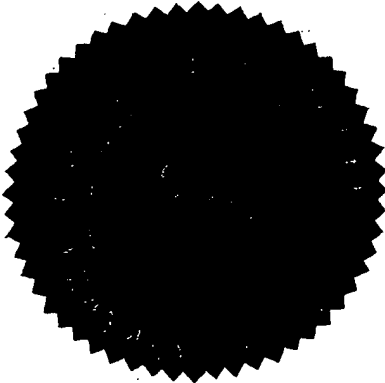
State of UNITED KINGDOM :
: ss.
County of CHESTER :

Before me this 24th day of July, 2002, personally appeared
Michael D. Edge, known to me to be the person whose name is subscribed to the foregoing
Assignment and acknowledged that he executed the same as his free act and deed for the
purposes therein contained.

Robin Galbraith Moore

Notary Public

My Commission Expires: at death



ROBIN GALBRAITH MOORE
NOTARY PUBLIC
Grosvenor Court, Chester
CH1 1HG

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Michael D. Edge et al. Art Unit : 1632
Serial No. : 09/398,610 Examiner : A. Beckerleg
Filed : September 17, 1999
Title : TRANSGENICALLY PRODUCED FUSION PROTEINS

U.S. Patent and Trademark Office
Assignment Division
Box Assignments—CG-4
1213 Jefferson Davis Highway
Suite 320
Washington, D.C. 20231

REQUEST TO CORRECT NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

Applicants request that the assignee's name be corrected on the Notice of Recordation of Assignment Document for the above case. The assignee's name was misidentified on the originally filed Recordation Form Cover Sheet and should read --**AstraZeneca UK Limited**--. A copy of the Notice of Recordation of Assignment Document showing the desired change in red ink is attached for your convenience. Also included is a new Recordation Form Cover Sheet and Assignment indicating the correct assignee name.

As the mistake was made by us, enclosed is our check for the \$40.00 fee. Please apply any charges or credits to our Deposit Account No. 06-1050.

Respectfully submitted,

Date: 12/6/02

Laurie Lawrence
Laurie Butler Lawrence
Reg. No. 46,593

Fish & Richardson P.C.
225 Franklin Street
Boston, Massachusetts 02110-2804
(617) 542-5070 telephone
(617) 542-8906 facsimile

20551448.doc

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

December 6, 2002
Date of Deposit

Cassandra Beepot
Signature

Cassandra Beepot
Typed or Printed Name of Person Signing Certificate



UNITED STATES
PATENT AND
TRADEMARK OFFICE

PLM
GLF

10275-137001

APRIL 25, 2002

PTAS

Commissioner for Trademarks
Arlington, VA 22202-3513
www.uspto.gov

FISH & RICHARDSON P.C.
~~LOUIS WEISS~~
225 FRANKLIN STREET
BOSTON, MA 02110-2804



102003323A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/12/2002

REEL/FRAME: 012624/0041
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
EDGE, MICHAEL D.

DOC DATE: 03/16/2000

ASSIGNEE: UK
ASTRAZENECA LIMITED
15 STANHOPE GATE
LONDON W1Y 6LN, UNITED KINGDOM

SERIAL NUMBER: 09398610
PATENT NUMBER:

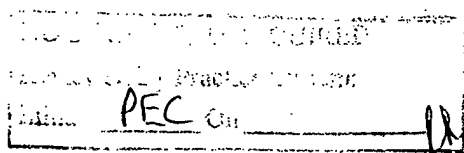
FILING DATE: 09/17/1999
ISSUE DATE:

LAZENA MARTIN, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

RECEIVED

APR 29 2002

FISH & RICHARDSON, P.C.
BOSTON OFFICE





UNITED STATES
PATENT AND
TRADEMARK OFFICE

10275/137001
PLM
CMY

APRIL 17, 2003

FISH & RICHARDSON P.C.
LOUIS MYERS
2255 FRANKLIN STREET
BOSTON, MA 02110-2804

RECEIVED
PTAS

APR 22 2003

FISH & RICHARDSON, P.C.
BOSTON OFFICE

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov



102314488A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/11/2002

REEL/FRAME: 013575/0931
NUMBER OF PAGES: 4

BRIEF: CORRECTIVE ASSIGNMENT TO CORRECT THE NAME OF THE ASSIGNEE FILED ON 02/12/02. RECORDED ON REEL 012624 FRAME 0041. ASSIGNOR HEREBY CONFIRMS THE ENTIRE INTEREST.

ASSIGNOR:

EDGE, MICHAEL D.

DOC DATE: 07/24/2002

ASSIGNEE:

ASTRAZENECA UK LIMITED
15 STANHOPE GATE
LONDON W1Y 6LN, UNITED KINGDOM

SERIAL NUMBER: 09396610
PATENT NUMBER:

FILING DATE: 09/15/1999
ISSUE DATE:

DOROTHY RILEY, PARALEGAL
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

12-18-2002

Substitute Form PTO-1595
 Attorney Docket No.: 10275-137001
 Client's Ref. No.: GTC-42



102314488

SHEET

C

Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Michael D. Edge Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): AstraZeneca UK Limited 15 Stanhope Gate London W1Y 6LN United Kingdom Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input checked="" type="checkbox"/> Other: Request to Correct Notice of Recordation of Assignment Document Execution Date: 7/24/02	OFFICE OF PUBLIC RECORDS FINANCE SECTION DEC 11 AM 8:17
4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 09/398,610 Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name/address of party to whom correspondence concerning document should be mailed: LOUIS MYERS Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i>	
Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing	 Signature 12/06/02 Date
Total number of pages including coversheet, attachments and document: 3	

20551404.doc

12/17/2002 DAYRHE 00000208 09398610

01 FC:8021

40.00 TP

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

12/6/02
 Date of Deposit

Cassandra Beepot
 Signature

Cassandra Beepot
 Typed Name of Person Signing Certificate

03-06-2002

Substitute Form PTO-1595
Attorney Docket No.: 10275-137001

102003323

RECC

Commissioner for Patents: Please record the attached original document(s) or copy(ies).

1. Name of conveying party(ies):

Michael D. Edge

Additional name(s) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment
☐ Merger
☐ Security Agreement
☐ Change of Name
☐ Other:

Execution Date: 03/16/2000

2. Name and address of receiving party(ies):

AstraZeneca Limited
 15 Stanhope Gate
 London W1Y 6LN
 United Kingdom

Additional names/addresses attached? ☐ Yes ☒ No

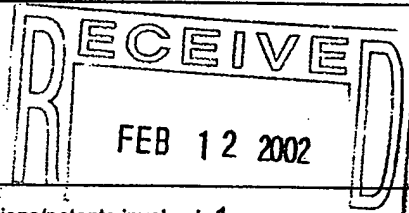
4. Application number(s) or patent number(s):

If this document is being filed with a new application, the execution date of the application is:

A. Patent Application No(s):

09/398,610

B: Patent No(s):

Additional numbers attached? ☐ Yes ☒ No

5. Name/address of party to whom correspondence concerning document should be mailed:

LOUIS MYERS
 Fish & Richardson P.C.
 225 Franklin Street
 Boston, Massachusetts 02110-2804

6. Total number of applications/patents involved: 1

7. Total fee (37 CFR §3.41): \$40

- ☒ Enclosed
☐ Authorized to charge Deposit Account.

8. Deposit Account No.: 06-1050

Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.

DO NOT USE THIS SPACE

9. Statement and Signature: *To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Laurie Butler Lawrence

Reg. No. 46,593

Name of Person Signing

Laurie Lawrence
 Signature

1/17/02
 Date

Total number of pages including coversheet, attachments and document: 3

20371945.doc

03/05/2002 6TON11 00000210 09398610

01 FC:581

40.00 OP

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

1/17/02
 Date of Deposit

Terri L Knox
 Signature

Terri L Knox
 Typed Name of Person Signing Certificate

ASSIGNMENT

For valuable consideration, I, Michael D. Edge, of Macclesfield, Cheshire, United Kingdom, hereby assign to AstraZeneca UK Limited, a Great Britain corporation having a place of business at 15 Stanhope Gate, London W1Y 6LN, United Kingdom, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by me this day, entitled TRANSGENICALLY PRODUCED FUSION PROTEINS, filed September 17, 1999, and assigned U.S. Serial Number 09/398,610, and I authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and I agree for me and my respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at CHESTER, U.K.
this 24th day of July, 2002
Michael D. Edge L.S.
Michael D. Edge

State of UNITED KINGDOM :
: ss.
County of CHESTER :

Before me this 24th day of July, 2002, personally appeared
Michael D. Edge, known to me to be the person whose name is subscribed to the foregoing
Assignment and acknowledged that he executed the same as his free act and deed for the
purposes therein contained.

Robin Galbraith Moore

Notary Public

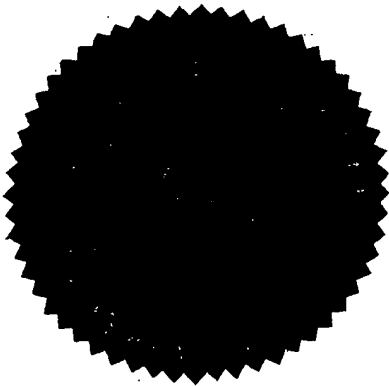
My Commission Expires: at death

ROBIN GALBRAITH MOORE

NOTARY PUBLIC

Grosvenor Court, Chester

CH1 1HG



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Michael D. Edge et al. Art Unit : 1632
Serial No. : 09/398,610 Examiner : A. Beckerleg
Filed : September 17, 1999
Title : TRANSGENICALLY PRODUCED FUSION PROTEINS

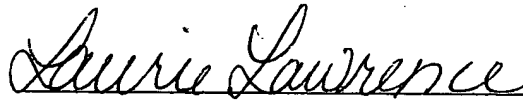
U.S. Patent and Trademark Office
Assignment Division
Box Assignments—CG-4
1213 Jefferson Davis Highway
Suite 320
Washington, D.C. 20231

REQUEST TO CORRECT NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

Applicants request that the assignee's name be corrected on the Notice of Recordation of Assignment Document for the above case. The assignee's name was misidentified on the originally filed Recordation Form Cover Sheet and should read --**AstraZeneca UK Limited**--. A copy of the Notice of Recordation of Assignment Document showing the desired change in red ink is attached for your convenience. Also included is a new Recordation Form Cover Sheet and Assignment indicating the correct assignee name.

As the mistake was made by us, enclosed is our check for the \$40.00 fee. Please apply any charges or credits to our Deposit Account No. 06-1050.

Respectfully submitted,


Laurie Butler Lawrence
Reg. No. 46,593

Date: 12/6/02

Fish & Richardson P.C.
225 Franklin Street
Boston, Massachusetts 02110-2804
(617) 542-5070 telephone
(617) 542-8906 facsimile

20551448.doc

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

Date of Deposit December 6, 2002

Signature Cassandra Beepot

Typed or Printed Name of Person Signing Certificate Cassandra Beepot



PLM
GLF

10275-137001

APRIL 25, 2002

PTAS

Commissioner for Trademarks
Arlington, VA 22202-3513
www.uspto.gov

FISH & RICHARDSON P.C.
225 FRANKLIN STREET
BOSTON, MA 02110-2804



102003323A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/12/2002

REEL/FRAME: 012624/0041
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

EDGE, MICHAEL D.

DOC DATE: 03/16/2000

ASSIGNEE:

UK

ASTRAZENECA LIMITED

15 STANHOPE GATE

LONDON W1Y 6LN, UNITED KINGDOM

SERIAL NUMBER: 09398610

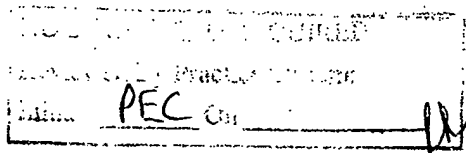
FILING DATE: 09/17/1999

PATENT NUMBER:

ISSUE DATE:

LAZENA MARTIN, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

RECEIVED
APR 29 2002
FISH & RICHARDSON, P.C.
BOSTON OFFICE





UNITED STATES
PATENT AND
TRADEMARK OFFICE

PLM
GLF

APRIL 25, 2002

PTAS

10275-137001
Commissioner for Trademarks
Arlington, VA 22202-3513
www.uspto.gov

FISH & RICHARDSON P.C.
~~LOUIS RIVERS~~
225 FRANKLIN STREET
BOSTON, MA 02110-2804



102003322A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/12/2002

REEL/FRAME: 012624/0047
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

RYBAK, SUSANNA M.

DOC DATE: 04/06/2000

ASSIGNEE:

UNITED STATES OF AMERICA, AS
REPRESENTED BY THE SECRETARY OF
HEALTH AND HUMAN SERVICES
OFFICE OF TECHNOLOGY TRANSFER
6011 EXECUTIVE BLVD., SUITE 325
ROCKVILLE, MARYLAND 20852-3804

SERIAL NUMBER: 09398610
PATENT NUMBER:

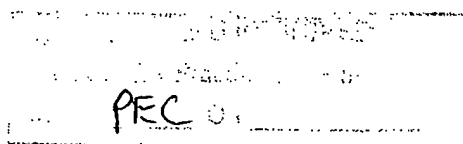
FILING DATE: 09/17/1999
ISSUE DATE:

RECEIVED

SAUNDRA BALLENGER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

APR 29 2002

FISH & RICHARDSON, P.C.
BOSTON OFFICE



03-06-2002

Substitute Form PTO-1595
Attorney Docket No.: 10275-137001

RECOI



102003322

Commissioner for Patents: Please record the attached original document(s) or copy(ies).

1. Name of conveying party(ies): Dr. Susanna M. Rybak Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		2. Name and address of receiving party(ies): United States of America, as represented by The Secretary of Health and Human Services Office of Technology Transfer Suite 325 6011 Executive Blvd. Rockville, MD 20852-3804 Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 04/06/2000		4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 09/398,610 Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No B. Patent No(s):				
5. Name/address of party to whom correspondence concerning document should be mailed: LOUIS MYERS Fish & Richardson P.C. 225 Franklin Street Boston, Massachusetts 02110-2804		6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.				
DO NOT USE THIS SPACE						
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> <table border="0"> <tr> <td> Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing </td> <td> Signature </td> <td> 1/17/02 Date </td> </tr> </table>				Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing	 Signature	1/17/02 Date
Laurie Butler Lawrence Reg. No. 46,593 Name of Person Signing	 Signature	1/17/02 Date				
Total number of pages including coversheet, attachments and document: 3						

20371937.doc

03/05/2002 6TCH11 00000211 09398610

01 FC:581

40.00 DP

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

1/17/02		Terri L. Knox
Date of Deposit	Signature	Typed Name of Person Signing Certificate

ASSIGNMENT

For valuable consideration, I, Susanna M. Rybak, of, Frederick, MD, hereby assign to the government of the United States of America as represented by the Secretary of the Department of Health and Human Services, (hereinafter, THE GOVERNMENT) and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by me this day, entitled TRANSGENICALLY PRODUCED FUSION PROTEINS filed September 17, 1999, and assigned U.S. Serial Number 09/398,610, and I authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and I agree for me and my respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at NCI/FCRDC
this 6 day of April, 2000
Susanna M. Rybak L.S.

State of Maryland :
: ss.
County of Frederick :

Before me this 6 day of April, 2000, personally appeared
Susanna M. Rybak, known to me to be the person whose name is subscribed to the foregoing
Assignment and acknowledged that she executed the same as her free act and deed for the
purposes therein contained.

Ann E. Rogers
Notary Public
My Commission Expires: 04/01/01

[Notary's Seal Here]

20015173.doc



UNITED STATES
PATENT AND
TRADEMARK OFFICE

LSB

10275-137001

JANUARY 31, 2002

PTAS

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov

FISH & RICHARDSON P.C.
LOUIS MYERS
225 FRANKLIN STREET
BOSTON, MASSACHUSETTS 02110-2804



101952985A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF
THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS
AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER
REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE
INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA
PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD
FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY
CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723.
PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE,
ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY,
SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/17/2002

REEL/FRAME: 012349/0127
NUMBER OF PAGES: 5

BRIEF: DOCUMENT RE-RECORDED TO CORRECT ERRORS CONTAINED IN PROPERTY
NUMBER 09398620 DOCUMENT PREVIOUSLY RECORDED ON REEL 010847
FRAME 0196.

ASSIGNOR:
POLLOCK, DAN

DOC DATE: 04/11/2001

ASSIGNOR:
ECHELAND, YANN

DOC DATE: 04/06/2001

ASSIGNOR:
MEADE, HARRY M.

DOC DATE: **RECEIVED**

ASSIGNEE:
GENZYME TRANSGENICS CORPORATION
175 CROSSING BOULEVARD
POST OFFICE BOX 9322
FRAMINGHAM, MASSACHUSETTS
01701-
9322

FEB 07 2002
FISH & RICHARDSON, PC.
BOSTON OFFICE

SERIAL NUMBER: 09398610
PATENT NUMBER:

FILING DATE: 09/17/1999
ISSUE DATE:

NO DOCKETING REQUIRED
Reviewed By Practice Systems
Initials PEC On pl

012349/0127 PAGE 2

SHARON LATIMER, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

01-30-2002

REC



ET

101952985

Commissioner for Patents: Please record the attached original document(s) or copy(ies).

1. Name of conveying party(ies):

Dan Pollock, Yann Echelard and Harry M. Meade

Additional name(s) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Genzyme Transgenics Corporation
175 Crossing Boulevard
Post Office Box 9322
Framingham, MA 01701-9322

Additional names/addresses attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☐ Assignment
☐ Merger
☐ Security Agreement
☐ Change of Name
☒ Other: Corrective of 010847/0196, Serial 09/398,620

Execution Date: 04/06/00; 04/11/00

4. Application number(s) or patent number(s):

If this document is being filed with a new application, the execution date of the application is:

A. Patent Application No(s):

09/398,610

B. Patent No(s):

Additional numbers attached? ☐ Yes ☒ No

5. Name/address of party to whom correspondence concerning document should be mailed:

LOUIS MYERS
Fish & Richardson P.C.
225 Franklin Street
Boston, Massachusetts 02110-2804

6. Total number of applications/patents involved: 1

7. Total fee (37 CFR §3.41): \$40

- ☐ Enclosed
☐ Authorized to charge Deposit Account.

8. Deposit Account No.: 06-1050

Please apply any additional charges, or any credits, to our
Deposit Account No. 06-1050.

DO NOT USE THIS SPACE

fee OK

9. Statement and Signature: *To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Laurie Butler Lawrence
Reg. No. 46,593
Name of Person Signing

Signature

1/17/02
Date

Total number of pages including coversheet, attachments and document:

20371320.doc

CERTIFICATE OF TRANSMISSION BY FACSIMILE

I hereby certify that this correspondence is being transmitted by facsimile to the Patent and Trademark Office on the date indicated below.

1/17/02
Date of Transmission

Signature

Terri L. Knox
Typed Name of Person Signing Certificate



06-16-2000



101382243

2 SHEET

Substitute Form PTO-1595
Attorney Docket No.: 10275-137001

S-31-00

Assistant Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Dan Pollock, Yann Echelard and Harry M. Meade Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): Genzyme Transgenics, Inc. Five Mountain Road Framingham, MA 01701-9322 Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 04/08/00 and 04/11/00	
4. Application number(s) or patent number(s): 09/398,620 If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): B. Patent No(s): Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name/address of party to whom correspondence concerning document should be mailed: P. LOUIS MYERS Fish & Richardson P.C. 225 Franklin Street Boston, MA 02110-2804	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 06-1050 Please apply any additionally charges, or any credits, to our Deposit Account No. 06-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Lauranne Butler Reg. No. P46,593 Name of Person Signing Lauranne Butler Signature 5/26/00 Date Total number of pages including coversheet, attachments and document: 4	

20087256.doc

06/15/2000 ASCOTT 00000140 09398620
01 FC:581 40.00 OP

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner of Patents, Washington, D.C. 20231.

Date of Deposit

Signature

Typed Name of Person Signing Certificate

RECEIVED
OCT 30 2003
TECHNOLOGY CENTER 2003

ASSIGNMENT

For valuable consideration, we, Dan Pollock of Medway, MA; Yann Echelard of Jamaica Plain, MA; and Harry M. Meade of Newton, MA, hereby assign to Genzyme Transgenics, Inc., a Massachusetts corporation having a place of business at: Five Mountain Road, Framingham, MA 01701-9322, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us this day, entitled **TRANSGENICALLY PRODUCED FUSION PROTEINS**, filed September 17, 1999, and assigned U.S. Serial Number 09/398,610, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at One Mountain Road, Franconia, NH
this 11 day of April, 2000
Dan Pollock L.S.
Dan Pollock

State of New Hampshire:
: ss.

County of Merrimack :

Before me this 11 day of April, 2000, personally appeared
Dan Pollock, known to me to be the person whose name is subscribed to the foregoing
Assignment and acknowledged that he executed the same as his free act and deed for the
purposes therein contained.

USA Marie Seavey
Notary Public

My Commission Expires:

USA MARIE SEAVEY
Notary Public

My Comm. Expires Dec. 13, 2007

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at 175 Crossing Blvd., Franconia, NH
this 6 day of April, 2000
Yann Echelard L.S.
Yann Echelard

State of New Hampshire:
: ss.

County of Middlebury :

Before me this 6 day of April, 2000, personally appeared Yann Echelard, known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

USA Marie Seavely
Notary Public

My Commission Expires:

USA MARIE SEAVELY
Notary Public
Comm. Expires Dec. 13, 2002

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at One Mountain Road Framingham
this 11 day of April, 2000
Harry M. Meade L.S.
Harry M. Meade.

State of Massachusetts :
: ss.
County of Dorchester :

Before me this 11 day of April, 2000, personally appeared Harry M. Meade, known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

USA Marie Seavely
Notary Public

My Commission Expires:

USA MARIE SEAVELY
Notary Public
Comm. Expires Dec. 13, 2002

[Notary's Seal Here] +